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Verbal Behavior and the History of Linguistics

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A recent paper by a historian of linguistics suggests that after many years of neglect linquists are finding value in the analysis of verbal behavior developed by B.F. Skinner.

A recently published paper may be of interest to readers of this journal as it adds new evidence to the view that after decades of neglect linguists are slowly coming to find value in the functional analysis of verbal behavior developed by B. F. Skinner (1957). In recent years psycholinguists, and more traditional practitioners of language analysis, have began to examine the circumstances, or as they have it, "the context" in which language occurs, including the effect of others on the language development of the speaker (see Knapp, 1985 for a description of a psycholinguistic research program on the variables that influence "requesting" and "labelling" by children). Now, a historian of linguistics has suggested that a reexamination of the role played by *Verbal Behavior* (Skinner, 1957) in the recent history of the discipline of linguistics is in order. Writing in an issue of *Historiographia Linguistica*, J. T. Andresen, in a paper titled "Skinner and Chomsky thirty years later," argues that Skinner's "approach is interesting, even salutary, and that writing Skinner into the record changes the history of what we think our discipline to be and thereby reconfigues the disciplinary boundaries—which is, after all, the purpose of historiography" (Andresen, 1990, p. 155).

Based on a presentation at the Linguistic Society of America, Andresen explains in her paper why the book *Verbal Behavior* has to date exerted so little influence on linguistic analysis. Her answer begins with the infamous Chomsky review in *Language* (Chomsky, 1959). It seems as though Chomsky's review is the pathway to any external (outside the field of behavior analysis) examination of *Verbal Behavior*. None of the previous efforts to lessen the force of Chomsky's criticism seem to have succeeded (MacCorquodale, 1970; Segal, 1972). However, Andresen sees the neglect by linguists of *Verbal Behavior* as influenced not only by Chomsky's critical review, but also by his simultaneous advocacy of a new look in linguistics, transformational (generative) grammar.

Andresen advances four reasons for the rise of generative grammar in the late 1950s, and the concurrent "repression" of Skinnerian behaviorism. The first is "cognitive taste," an essentially aesthetic criterion by which Chomsky's formulation is more elegant, neater, cleaner, better looking on paper. On the other hand, Andresen observes "*Verbal Behavior*, with its rush of details, its humor and its eccentricities, must have seemed cluttered and inelegant" (p. 147). Taste or matters of aesthetics may seem an unusual criterion to appeal to in explaining the rejection of a set of ideas, but those familiar with *Verbal Behavior* should find Andresen's claim credible. As readers we react to verbal behavior in a variety of ways, one dimension of which is captured by the field of aesthetics. For some Clark Hull's *Principles of Behavior* (1943) may have been attractive, and hence influential, because of the aesthetic similarity to Newton's great work. This was apparently the case for Hull himself. There

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is fashion in the world of ideas, and certainly Chomsky's style carried the day in linguistics as Hull's had in psychology.

Secondly, Andresen suggests that the increased funding which became available following the launch of Sputnik by the Soviet Union largely went to the precursors of contemporary artificial intelligence research, and did so because significant persons in the early years of the field "killed" efforts at "building neural networks with features inherited from the study of the brain..." in favor of models with "formalizable domains, computational complexity and algorithmic power" (p. 148). Andresen sees in the emerging parallel distributed models, in the new *connectionism*, a renewed consideration of views that earlier may have been rejected for their associative, or assumed, associative nature. This may seem like a far reach, but some interesting papers and one clever book (Edelman, 1987) are cited. The reaction of radical behaviorists to the new look in cognitive psychology, connectionism, is not yet fully received, but the initial papers are interesting (see for example, especially Donahoe & Palmer, 1989; but also Malone, 1990). If in the 1960s connectionists models had emerged rather than serial information processing models, perhaps Skinner's functional analysis of verbal behavior would have been more palatable to mid-twentieth century psycholinguists.

Thirdly, Skinner's account in *Verbal Behavior* left no room for the "autonomous speaking agent," the speaker was a "locality" rather than an "actor." This view directly contrasts with the agent inherent in Chomsky's formulation, a view that Chomsky in recent years has related to political and moral causes; namely, that the concept of human rights is necessarily tied to particular views of human nature. Andresen asserts to the contrary, "The power of essentializing humanism is running out of steam, and the search for those genetically-encoded, hardwired, essential absolutes of humanness must eventually be abandoned" (p. 152). For Andresen, malevolence occurs "without any theory of language (or human nature) whatever" (p. 153). She observes that Chomsky has shifted his arguments against radical behaviorism from epistemological grounds to moral ones. This is a claim worth pursuing, and warrants more discussion than Andresen is able to provide.

Fourthly, Andresen argues that "Chomsky's review had the effect of barring the possibility of Skinner participating in the intraverbal behavior called `linguistics' " (p. 154). In this we arrive at her main point: *Verbal Behavior* was effectively excluded from the "textual tradition" of linguistics. I gather from Andresen that the ultimate consequence of Chomsky's review among linguists was their coming to view Skinner's book as reflecting such an unfamiliarity with the most fundamental and basic traditions in the discipline of linguistics as to be incredible. Chomsky in his review provided the image of Skinner as simply uninformed about elementary and presumptive matters of language. Hence, the history of mid-twentieth century linguistics consists of a critical review, but not the text which the review took as its critical object. Apparently, one of the functions of linguistic historiography is to recover these "lost or forgotten" texts. (Within this discussion, Andresen suggests that the concept of the intraverbal is similar to Michel Foucault's notion of "discourse." Though touched on only briefly, this is one of the first comparisons I have seen between aspects of Skinner's work, and the influential French intellectual with whom many scholars in the humanities are currently taken. Foucault's (1984) paper "What is an author" may be a useful starting point for those wishing to pursue the comparison.)

Finally, Andresen notes Skinner's analysis may have been neglected because, as its Soviet reviewer suggested, it ignored the social dimension of human behavior (Tikhomirov, 1959). Andresen does not elaborate on this point. Rather the mention of the Soviet reviewer provides a transition to the last portion of Andresen's paper, which while interesting, seems to lack a clear relationship to her earlier remarks. In

this section Skinner's views are compared along a number of dimensions to those of V. N. Volosinov (1973/1929), a Soviet linguist, who in his *Marxism and the Philosophy of Language* described a "behavioral ideology." According to Andresen Volosinov's account shared with Skinner's formulation of verbal behavior the features of rejecting the individual as an agent, of "meaning" as adhering in things, of language as a codified body of fixed, or nearly so, knowledge, and of accepting language as a form of action.

In reviewing Andresen's reasons for the represssion of Skinner and the acceptance of generative grammar, Andresen might have added another reason: Chomsky's formulation gave both the linguists and the psychologists something to do. The linguists began to write transformational grammars, and the psychologists began to use different structures as independent varaibles in experimental studies. No one, even among behavior analysts, seemed to know what to do next after reading *Verbal Behavior*. It took nearly twenty years for the appearance of systematic studies that could be traced directly to the formulation Skinner had provided in his book (glossing over here the early examples of merely manipulating the consequences of verbal behavior). Behavior analysts were not certain how to treat Skinner's "interpretative" work, and it may be we should have expected no more from the community of linguists.

Andresen remarks that she was able to find only a few reviews of *Verbal Behavior*, and none in psychology journals. There were, however, more than a dozen published reviews of *Verbal Behavior* (Knapp, in preparation), including a number in major psychology and related journals. The book was not ignored, nor found entirely wanting as might be concluded from the disproportionate attention that the Chomksy review has received.

The appearance of Andresen's paper indicates that new readers are still coming to *Verbal Behavior*, and are changed by it. The wide ranging nature of her references is instructive, and one can only regret that her work is a journal manuscript, and not a book, which would have afforded a more in depth exploration of the historical issues she has raised. Perhaps that is in the future. Andresen has provided a provocative prompt.

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